

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for encrypting characters from a data element in a relational database, the method comprising:

reading a data type of a first data element, said first data element including a first character string;

interpreting said data type to form a restricting character set ; and

encrypting [each character of said first data element] said first character string into [an encrypted character] a second character string, each character in said second character string being selected from said restricting character set, said first character string uniquely corresponding to said second character string.

2. (previously presented) A method according to claim 1, comprising the further step of:  
arranging one or more character sets in a pattern for a data type.

3. (currently amended) A method according to claim 1 or 2, wherein the number of characters in the second character string is equal to the number of characters in the first character string [the encryption results in a data element having the same number of characters as the unencrypted data element].

4. (currently amended) A method according to claim 1, comprising the further steps of:  
converting each character of said first character string to an index value; and  
adding a varying value to each index value before encryption.

5. (currently amended) A method according to claim 4, wherein the varying value is obtained by the steps of:

creating an initial value by hashing [the] an encryption key;

adding adjacent index values pairwise from the left to the right using said initial value when adding the leftmost character.

6. (previously presented) A method according to claim 1, wherein the encryption is performed using the DES algorithm in cipher mode.

7. (currently amended) A system for encrypting characters from a data element in a relational database, the system comprising:

reading means for reading a data type of a first data element, said first data element including a first character string;

interpretation means for interpreting said data type to form a restricting character set ; and

encryption means for encrypting said first character string [each character of said first data element] into [an encrypted character] a second character string, each character in said second character string being selected from said restricting character set, said first character string uniquely corresponding to said second character string.

8. (currently amended) A method according to claim 1, further comprising:

storing said [encrypted characters] second character string in a second data element in said relational database.

9. (previously presented) A method according to claim 8, wherein said first data element and said second data element are the same data element.

10. (currently amended) A system according to claim 7, further comprising:

storing means for storing said [encrypted characters] second character string in a second data element in said relational database.

11. (previously presented) A system according to claim 10, wherein said first data element and said second data element are the same data element.